

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: NEO-RAY

Report Number: P332975-830

Luminaire Tested: **SA4XXRDIP-C1020D1035U830-4F0-1E-UDD-A4**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P332975-830
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-18,
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: SA4XXRDIP-C1020D1035U830-4F0-1E-UDD-A4
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1020 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING
UPLIGHT 1035 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

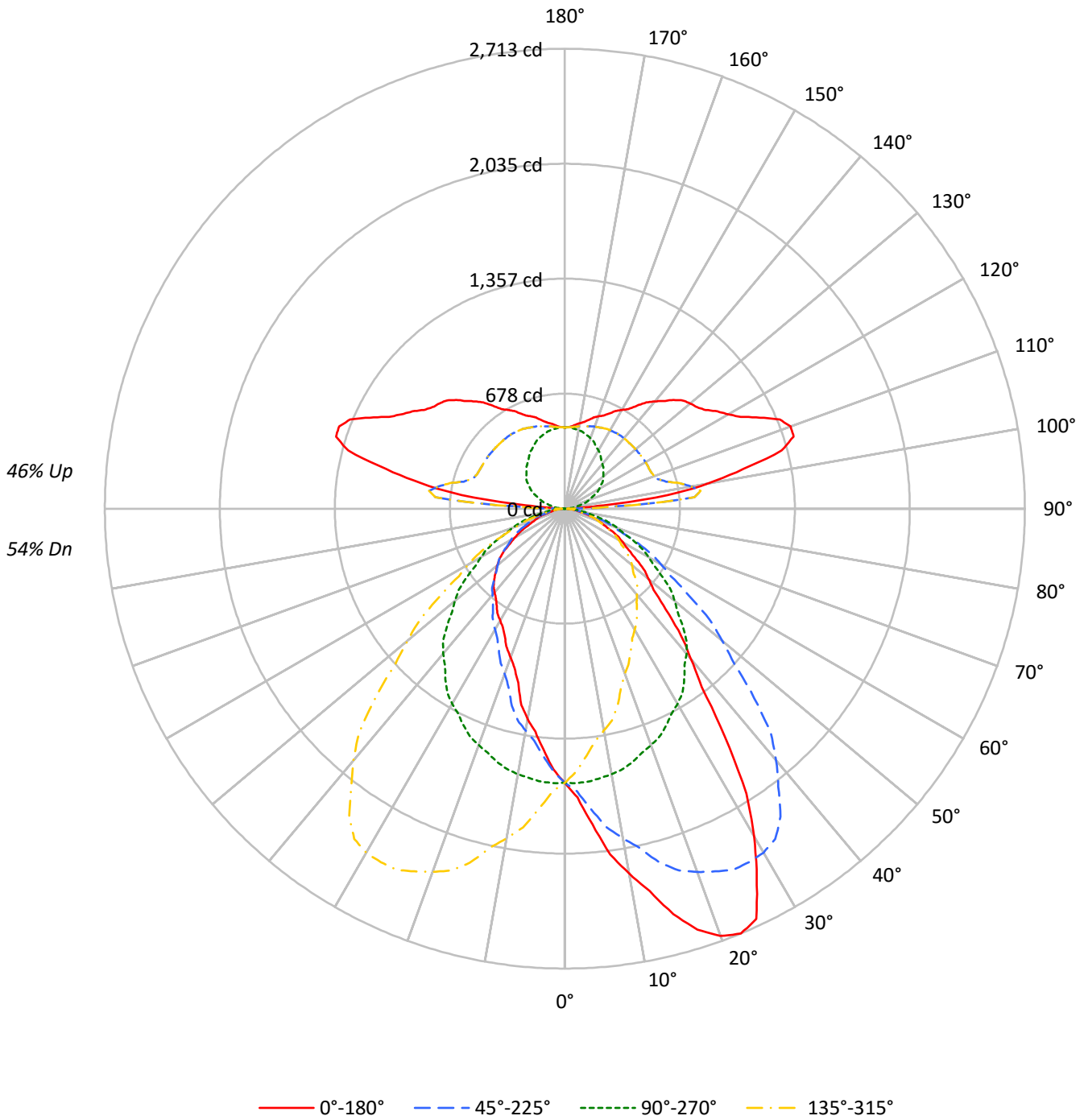
Lumens per Lamp: N/A
Luminaire Lumens: 7573.9 lumens
Efficiency: N/A
Efficacy: 125.2 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.23 / 1.39
Luminous Opening: Rectangular (W 4' x L: 0.33' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 60.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	108	108	108	108	100	100	100	100	86	86	86	72	72	72	60	60	60	54
1	99	95	91	88	92	88	85	82	76	73	71	64	63	61	54	53	52	47
2	91	84	78	73	84	78	73	68	67	63	60	57	54	52	48	46	44	40
3	83	74	67	61	77	69	63	58	60	55	51	51	47	44	43	40	38	34
4	76	66	58	52	70	61	55	49	53	48	44	46	42	38	39	36	33	30
5	70	59	51	45	65	55	48	43	48	42	38	41	37	34	35	32	29	26
6	65	53	45	39	60	50	42	37	43	38	33	37	33	30	32	28	26	23
7	60	48	40	35	56	45	38	33	39	34	30	34	30	26	29	26	23	21
8	56	44	36	31	52	41	34	29	36	30	26	31	27	24	27	23	21	19
9	52	40	32	27	48	37	31	26	33	28	24	29	24	21	25	21	19	17
10	49	37	29	25	45	34	28	24	30	25	21	27	22	19	23	20	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	13056	13056	13056	13056
5°	15144	13095	11574	13095
10°	17915	13038	10330	13038
15°	20695	12918	8877	12918
20°	23040	12752	8027	12752
25°	23785	12588	7452	12588
30°	20821	12392	7106	12392
35°	16208	12098	6897	12098
40°	12154	11763	6785	11763
45°	9597	11226	6725	11226
50°	8102	10605	6531	10605
55°	7061	9923	6180	9923
60°	6353	9216	5470	9216
65°	5601	8451	4705	8451
70°	5044	7659	4244	7659
75°	4226	6787	3618	6787
80°	3575	5783	3394	5783
85°	3020	4520	3020	4520



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.7	2.1
10°-20°	472.7	6.2
20°-30°	739.3	9.8
30°-40°	821.9	10.9
40°-50°	729.2	9.6
50°-60°	568.2	7.5
60°-70°	372.0	4.9
70°-80°	182.9	2.4
80°-90°	47.8	0.6
90°-100°	345.9	4.6
100°-110°	720.0	9.5
110°-120°	644.9	8.5
120°-130°	542.4	7.2
130°-140°	452.3	6.0
140°-150°	345.5	4.6
150°-160°	242.9	3.2
160°-170°	142.9	1.9
170°-180°	46.5	0.6
0°-30°	1368.7	18.1
0°-40°	2190.5	28.9
0°-60°	3487.9	46.1
0°-90°	4090.6	54.0
90°-120°	1710.8	22.6
90°-150°	3051.1	40.3
90°-180°	3483.0	46.0
0°-180°	7573.9	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1617	1617	1617	1617	1617	
5°	1869	1616	1428	1616	1869	189
15°	2476	1546	1062	1546	2476	704
25°	2670	1413	837	1413	2670	1185
35°	1645	1228	700	1228	1645	1031
45°	841	983	589	983	841	666
55°	502	705	439	705	502	456
65°	293	442	246	442	293	295
75°	136	218	116	218	136	149
85°	33	49	33	49	33	37
90°	20	1	20	1	20	17
95°	230	31	230	31	230	356
105°	1324	110	1324	110	1324	1309
115°	1271	194	1271	194	1271	1262
125°	1014	270	1014	270	1014	922
135°	907	321	907	321	907	700
145°	741	370	741	370	741	469
155°	620	421	620	421	620	289
165°	541	458	541	458	541	155
175°	487	478	487	478	487	47
180°	479	479	479	479	479	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2
2.5°	1705.8	1710.5	1705.8	1705.3	1700.2	1698.6	1696.5	1689.7	1677.2	1669.9	1671.4
5°	1868.8	1885.0	1875.9	1874.6	1860.3	1846.0	1836.8	1816.0	1793.8	1778.9	1766.4
7.5°	2057.2	2066.5	2060.9	2051.7	2028.5	2015.3	1994.2	1966.7	1927.0	1896.6	1868.9
10°	2185.4	2193.2	2190.7	2173.7	2156.7	2122.2	2102.6	2064.3	2014.0	1974.3	1937.1
12.5°	2311.6	2319.9	2297.0	2297.7	2265.7	2238.4	2207.4	2159.1	2101.1	2049.8	2003.4
15°	2476.1	2465.6	2465.6	2452.6	2416.7	2379.0	2347.0	2296.2	2223.2	2161.9	2097.4
17.5°	2604.8	2608.4	2603.1	2572.3	2544.2	2505.1	2446.6	2387.3	2319.5	2237.3	2171.3
20°	2681.9	2681.9	2676.1	2655.2	2618.8	2577.0	2513.9	2449.3	2363.3	2280.6	2206.3
22.5°	2713.2	2715.3	2708.4	2691.1	2658.3	2617.6	2563.8	2498.3	2409.7	2316.5	2224.5
25°	2670.2	2682.6	2683.9	2679.3	2669.6	2644.8	2598.5	2531.4	2451.9	2350.9	2251.8
27.5°	2451.6	2467.2	2480.9	2503.4	2533.4	2549.0	2551.1	2517.0	2447.6	2350.4	2250.7
30°	2233.6	2246.6	2289.1	2344.4	2387.4	2426.5	2460.4	2469.5	2430.4	2343.1	2238.2
32.5°	1991.8	2009.5	2051.8	2111.4	2183.0	2249.3	2325.3	2364.2	2363.1	2310.7	2213.7
35°	1644.6	1657.6	1696.8	1759.3	1845.3	1943.7	2064.3	2158.0	2221.9	2217.3	2158.0
37.5°	1326.3	1341.0	1380.5	1432.5	1515.9	1637.7	1754.4	1883.6	2001.7	2068.0	2048.1
40°	1153.3	1154.0	1192.4	1245.9	1324.0	1430.2	1557.3	1700.6	1832.2	1939.8	1960.6
42.5°	1016.7	1016.8	1042.3	1099.9	1156.2	1256.1	1377.4	1519.8	1673.8	1798.0	1853.2
45°	840.6	846.4	867.2	901.8	946.1	1030.8	1127.8	1260.2	1432.9	1580.1	1672.0
47.5°	711.8	720.4	733.7	761.9	797.1	853.6	933.9	1052.7	1193.2	1355.2	1485.9
50°	645.1	646.4	663.3	678.9	709.5	754.5	824.9	924.0	1052.9	1208.7	1354.0
52.5°	587.8	587.5	597.7	617.5	642.3	677.4	734.2	824.3	938.8	1078.4	1228.3
55°	501.7	505.0	512.8	528.4	547.3	572.1	617.1	684.9	774.8	894.0	1030.2
57.5°	436.3	438.0	444.1	450.7	468.1	486.1	519.8	566.8	642.7	740.4	867.2
60°	393.5	394.2	396.2	406.0	419.6	436.6	459.4	499.1	563.0	652.2	752.6
62.5°	351.9	353.0	356.0	363.2	373.7	385.5	409.3	441.3	494.2	570.4	660.8
65°	293.2	293.9	298.4	301.0	309.5	319.9	337.5	359.0	395.5	459.4	527.8
67.5°	245.0	245.0	245.2	248.7	254.7	261.6	272.1	289.3	316.8	356.0	416.3
70°	213.7	213.7	215.0	217.0	220.3	226.1	232.0	245.0	265.2	297.1	343.4
72.5°	184.5	185.0	186.3	186.7	188.4	193.2	197.6	205.9	220.9	245.0	282.4
75°	135.5	137.5	140.7	143.4	146.6	146.0	150.5	155.7	160.3	174.7	196.1
77.5°	100.9	99.8	100.2	102.5	102.8	103.5	106.7	110.7	114.1	120.9	128.7
80°	76.9	76.9	78.8	79.5	78.8	79.5	82.8	84.7	86.1	88.6	95.8
82.5°	58.2	59.2	58.5	59.2	59.6	60.2	63.0	63.3	64.7	65.7	68.7
85°	32.6	33.3	33.8	32.6	32.6	32.6	33.8	34.5	35.8	35.2	36.5
87.5°	15.5	14.9	15.6	15.5	15.7	15.3	15.6	16.4	15.2	15.9	15.6
90°	19.8	19.8	20.7	19.8	18.9	18.9	17.9	17.0	16.0	17.0	15.1
92.5°	72.5	72.5	75.7	80.8	91.8	110.7	139.1	184.8	248.6	298.5	261.2
95°	229.6	241.9	258.7	287.9	334.0	425.3	551.4	697.2	788.5	766.9	578.7
97.5°	613.7	633.3	661.5	718.1	785.7	883.9	975.9	1030.2	990.6	807.7	541.6
100°	862.9	870.3	898.6	956.0	1037.8	1107.5	1153.6	1134.8	997.4	756.5	491.2
102.5°	1079.7	1085.7	1115.4	1157.0	1207.2	1236.2	1222.9	1129.5	940.9	692.6	457.3
105°	1323.9	1329.6	1342.7	1350.3	1348.4	1309.8	1216.6	1053.9	838.4	617.3	428.1
107.5°	1414.7	1412.2	1402.8	1381.3	1334.8	1250.9	1119.7	946.4	755.5	575.1	422.8
110°	1416.2	1407.7	1390.7	1351.2	1284.4	1180.9	1044.4	881.7	714.2	560.8	424.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1371.7	1358.0	1334.3	1286.5	1210.6	1107.1	978.2	834.2	690.9	554.0	428.9
115°	1271.2	1263.7	1233.6	1177.1	1102.8	1012.5	902.4	786.6	669.0	550.4	437.5
117.5°	1169.4	1163.6	1133.1	1085.7	1022.3	945.7	859.1	763.3	659.2	549.5	446.8
120°	1112.2	1101.8	1077.4	1035.9	982.3	915.6	840.3	752.7	653.9	549.5	453.6
122.5°	1067.1	1056.7	1035.9	1000.6	955.3	896.7	828.2	743.8	647.9	548.7	460.3
125°	1014.4	1008.7	990.8	963.6	925.9	874.1	809.2	728.3	638.0	547.6	470.5
127.5°	983.4	977.8	962.8	938.5	900.7	851.6	786.8	709.5	624.6	545.5	478.5
130°	965.4	959.8	944.7	921.1	882.6	832.7	768.7	694.5	616.3	544.8	484.6
132.5°	945.1	939.4	925.1	898.6	860.8	810.9	748.5	678.6	608.8	544.0	489.8
135°	907.1	901.4	886.4	860.1	822.4	775.3	717.9	656.8	597.5	542.9	497.8
137.5°	860.1	853.3	840.8	814.8	779.7	737.2	688.8	637.1	587.7	542.7	502.5
140°	826.1	818.6	805.5	784.8	751.8	712.3	670.0	625.8	582.5	542.0	506.2
142.5°	790.0	784.8	773.1	753.8	724.7	690.5	654.1	615.2	578.0	542.0	509.3
145°	740.6	735.8	726.4	710.4	686.9	660.5	632.4	600.3	570.2	540.1	511.0
147.5°	696.6	695.0	687.9	674.1	656.8	636.1	613.5	588.1	563.3	536.7	511.9
150°	671.8	670.9	665.2	653.0	638.0	621.0	602.2	580.6	558.0	534.4	511.9
152.5°	649.2	648.3	644.9	635.0	622.2	608.2	590.9	572.3	552.0	530.7	510.4
155°	620.1	620.1	617.3	609.7	600.3	589.0	575.0	559.9	542.9	525.1	508.1
157.5°	594.5	594.5	592.8	587.1	580.0	571.0	559.1	546.5	533.7	519.2	505.7
160°	578.7	578.7	577.8	572.1	566.5	558.9	548.6	538.2	527.0	514.7	503.4
162.5°	563.6	564.4	563.5	557.8	553.6	546.9	538.8	529.9	520.9	510.2	501.1
165°	541.0	542.0	542.9	539.1	535.4	530.7	524.1	518.5	511.0	503.4	496.8
167.5°	523.2	524.0	524.1	521.7	519.8	517.0	511.7	507.4	501.9	496.6	492.3
170°	511.9	511.9	512.8	511.9	510.0	507.2	503.4	500.6	495.9	492.1	489.3
172.5°	500.6	502.1	503.0	502.1	501.0	498.9	496.6	494.6	490.6	487.6	486.3
175°	487.4	489.3	491.2	489.3	489.3	489.3	487.4	486.4	484.6	482.7	482.7
177.5°	479.7	481.2	482.7	481.9	482.7	481.9	481.9	481.2	480.4	479.7	479.7
180°	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2
2.5°	1666.2	1659.0	1655.3	1646.9	1637.0	1631.8	1627.1	1620.3	1611.5	1602.1	1595.3
5°	1750.8	1735.1	1715.6	1692.1	1671.3	1651.1	1633.5	1615.9	1595.7	1574.9	1554.1
7.5°	1837.6	1806.9	1773.6	1735.1	1697.8	1663.8	1632.5	1602.5	1568.6	1538.2	1510.6
10°	1898.1	1856.3	1810.1	1761.2	1712.3	1670.0	1628.3	1590.5	1548.8	1511.6	1480.4
12.5°	1947.1	1898.1	1842.4	1781.6	1722.8	1671.6	1623.6	1574.3	1526.9	1486.7	1444.9
15°	2028.4	1961.2	1886.3	1813.4	1737.1	1667.4	1602.9	1545.6	1491.5	1434.8	1395.1
17.5°	2084.2	2004.7	1913.5	1825.9	1735.8	1653.6	1579.1	1510.9	1448.5	1390.6	1343.3
20°	2117.6	2029.7	1928.7	1829.0	1728.0	1640.0	1559.9	1484.3	1419.8	1357.3	1308.3
22.5°	2136.4	2039.1	1928.7	1824.3	1719.7	1624.4	1536.4	1457.7	1387.5	1324.9	1270.8
25°	2142.4	2038.2	1925.4	1805.5	1690.8	1589.9	1498.6	1413.2	1335.1	1272.5	1215.2
27.5°	2134.1	2011.3	1895.8	1772.8	1654.5	1548.0	1452.3	1362.6	1284.3	1217.2	1158.4
30°	2121.6	1989.9	1866.1	1738.4	1618.5	1516.3	1415.2	1329.3	1247.7	1178.1	1118.8
32.5°	2094.4	1963.9	1830.7	1699.9	1578.4	1473.0	1377.1	1290.6	1210.8	1139.5	1076.6
35°	2040.8	1908.5	1763.9	1629.7	1510.3	1400.9	1311.0	1227.6	1151.3	1075.2	1008.6
37.5°	1970.0	1834.8	1691.0	1544.0	1424.7	1321.3	1238.8	1160.5	1086.1	1016.4	942.8
40°	1903.3	1780.1	1631.5	1485.6	1363.1	1263.4	1187.2	1116.2	1041.2	972.1	898.5
42.5°	1822.5	1717.6	1567.4	1421.0	1300.0	1204.0	1132.9	1063.5	995.3	928.4	851.6
45°	1687.6	1608.1	1467.4	1326.6	1204.8	1109.7	1044.5	983.3	923.3	859.4	787.1
47.5°	1533.0	1479.2	1357.7	1213.6	1100.9	1015.3	952.3	902.3	851.6	787.8	724.3
50°	1425.7	1391.1	1273.8	1142.3	1034.7	955.8	891.4	844.4	802.1	740.8	684.2
52.5°	1311.0	1292.6	1193.5	1067.7	963.8	886.6	831.4	789.2	746.3	695.5	642.4
55°	1136.3	1146.1	1062.1	953.3	855.5	790.4	740.2	705.0	668.5	625.6	584.5
57.5°	957.8	993.5	937.1	841.6	750.0	689.8	652.0	622.4	591.7	556.1	521.0
60°	850.9	880.9	849.0	765.0	684.9	628.8	593.6	570.8	540.2	507.6	480.9
62.5°	746.7	778.7	759.9	692.0	617.6	569.4	538.4	517.1	494.3	465.9	438.1
65°	615.8	636.6	627.5	580.6	527.8	486.7	458.1	442.4	421.6	400.8	376.0
67.5°	471.6	511.9	506.5	481.6	436.0	404.0	385.2	371.4	352.4	336.9	320.1
70°	387.7	424.8	424.1	404.0	379.2	349.2	336.2	324.5	307.6	292.6	278.9
72.5°	317.4	351.4	356.4	340.9	324.0	301.3	288.8	280.7	264.3	254.0	242.9
75°	222.2	246.9	253.4	253.4	245.6	233.9	222.8	217.6	205.9	196.8	190.3
77.5°	145.7	161.4	171.5	173.8	175.0	171.1	162.0	158.3	149.3	146.1	139.9
80°	102.9	113.4	125.1	129.0	132.2	131.0	127.1	124.4	116.0	112.7	110.1
82.5°	71.2	76.9	86.5	95.1	94.3	97.6	94.3	92.2	85.8	84.5	82.0
85°	37.1	37.8	39.1	45.0	48.3	49.5	50.1	48.8	46.9	46.9	42.3
87.5°	15.2	14.6	14.5	14.5	14.9	16.8	17.7	17.9	16.7	15.7	14.3
90°	13.2	13.2	7.5	7.5	6.6	5.7	2.8	0.9	2.8	5.7	6.6
92.5°	190.1	117.1	69.3	49.7	35.9	24.5	15.6	10.7	15.6	24.5	35.9
95°	353.8	199.4	117.6	78.1	55.5	43.3	33.8	31.0	33.8	43.3	55.5
97.5°	318.0	190.7	127.6	94.4	75.1	63.8	55.7	55.7	55.7	63.8	75.1
100°	299.3	192.9	137.4	107.3	89.4	78.1	71.5	71.5	71.5	78.1	89.4
102.5°	294.0	200.4	150.1	121.6	104.4	93.9	88.0	86.5	88.0	93.9	104.4
105°	296.4	218.3	173.1	145.8	128.9	117.6	112.9	110.1	112.9	117.6	128.9
107.5°	310.3	239.2	197.7	170.9	154.7	142.6	138.0	136.1	138.0	142.6	154.7
110°	320.8	255.0	213.6	188.2	171.3	159.9	155.2	153.4	155.2	159.9	171.3



TEST NUMBER: P332975-830

CATALOG NUMBER: SA4XXRDIP-C1020D1035U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	332.2	270.0	230.2	204.7	187.8	177.3	171.8	169.9	171.8	177.3	187.8
115°	350.1	293.6	255.9	230.5	212.6	203.2	196.6	193.9	196.6	203.2	212.6
117.5°	368.3	316.3	280.6	254.2	237.5	227.2	221.3	218.7	221.3	227.2	237.5
120°	381.1	332.2	296.4	270.0	254.0	243.7	237.1	235.3	237.1	243.7	254.0
122.5°	393.1	347.2	311.4	285.9	268.3	258.7	252.1	250.3	252.1	258.7	268.3
125°	411.2	367.9	334.0	307.6	289.8	279.5	273.8	270.0	273.8	279.5	289.8
127.5°	426.8	387.1	354.4	327.8	309.2	297.4	290.6	287.6	290.6	297.4	309.2
130°	436.6	399.9	367.9	340.6	322.7	308.6	301.1	297.4	301.1	308.6	322.7
132.5°	446.4	410.5	378.4	352.7	333.3	319.9	310.1	307.1	310.1	319.9	333.3
135°	459.2	425.3	394.3	369.8	350.1	334.0	324.6	320.8	324.6	334.0	350.1
137.5°	468.3	436.6	407.6	384.3	363.7	348.6	338.2	334.6	338.2	348.6	363.7
140°	474.2	444.1	415.9	393.3	373.5	357.6	347.2	344.4	347.2	357.6	373.5
142.5°	478.7	450.9	423.4	401.6	382.6	367.3	357.8	355.0	357.8	367.3	382.6
145°	483.6	458.3	433.8	413.1	395.2	382.0	372.6	369.8	372.6	382.0	395.2
147.5°	488.0	465.8	442.8	424.1	409.3	395.8	387.5	386.5	387.5	395.8	409.3
150°	490.2	469.6	448.8	430.9	416.9	405.6	398.0	397.1	398.0	405.6	416.9
152.5°	491.7	472.6	454.1	437.7	425.1	414.6	407.1	406.9	407.1	414.6	425.1
155°	493.0	477.0	461.1	447.0	436.6	427.2	421.5	420.6	421.5	427.2	436.6
157.5°	493.0	480.2	466.7	455.6	446.6	439.2	433.9	433.9	433.9	439.2	446.6
160°	493.0	481.7	470.5	460.1	452.6	446.0	442.2	442.2	442.2	446.0	452.6
162.5°	493.0	483.2	472.8	464.7	457.9	452.0	449.0	449.8	449.0	452.0	457.9
165°	491.2	483.6	475.1	469.6	464.9	460.1	458.3	458.3	458.3	460.1	464.9
167.5°	488.9	483.4	477.2	473.0	470.3	466.7	465.8	466.7	465.8	466.7	470.3
170°	487.4	482.7	478.0	475.1	473.3	470.5	469.6	470.5	469.6	470.5	473.3
172.5°	485.9	481.9	478.7	476.6	475.5	473.4	473.3	474.2	473.3	473.4	475.5
175°	483.6	480.8	478.9	478.9	478.0	477.0	477.0	478.0	477.0	477.0	478.0
177.5°	481.2	479.7	478.9	478.9	478.9	478.2	478.9	479.7	478.9	478.2	478.9
180°	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9



TEST NUMBER: P332975-830

CATALOG NUMBER: SA4XXRDIP-C1020D1035U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2
2.5°	1588.0	1582.8	1576.0	1568.2	1558.9	1550.5	1546.9	1550.0	1551.5	1547.4	1546.9
5°	1539.7	1523.4	1510.3	1490.8	1475.2	1462.2	1453.0	1449.2	1450.4	1440.0	1437.4
7.5°	1485.4	1466.0	1444.7	1421.4	1399.9	1380.7	1370.6	1365.2	1354.2	1349.4	1341.5
10°	1450.4	1424.4	1403.5	1376.1	1351.4	1328.6	1317.5	1308.3	1297.3	1292.1	1281.0
12.5°	1414.5	1384.2	1361.3	1332.8	1307.6	1280.1	1269.5	1252.6	1235.3	1224.4	1210.1
15°	1363.8	1327.3	1299.3	1265.4	1235.4	1204.1	1176.1	1144.8	1133.1	1108.3	1094.0
17.5°	1304.5	1267.4	1232.8	1187.3	1141.0	1102.2	1072.3	1042.4	1024.4	1008.6	1001.4
20°	1265.4	1231.5	1183.3	1130.5	1079.0	1036.0	1011.9	992.4	972.8	961.8	953.9
22.5°	1228.3	1185.1	1129.1	1072.1	1020.7	987.0	966.6	946.5	930.6	920.0	909.6
25°	1166.3	1109.7	1050.4	985.2	950.0	920.7	898.5	882.2	872.5	858.8	853.6
27.5°	1102.6	1034.0	968.6	924.7	888.1	861.3	842.0	829.7	817.4	808.6	801.8
30°	1053.6	983.9	925.3	883.5	846.4	824.3	808.6	794.3	784.5	777.3	772.1
32.5°	1005.1	935.4	886.2	841.3	812.0	790.4	773.7	763.0	755.4	746.0	742.9
35°	935.0	873.1	830.1	789.8	759.8	740.2	727.2	716.0	709.5	707.0	705.0
37.5°	867.6	817.0	770.7	737.6	710.9	695.5	680.1	674.7	670.2	665.5	667.6
40°	824.9	777.3	736.3	701.1	679.6	662.7	653.6	647.1	643.1	643.1	643.1
42.5°	787.9	741.4	701.3	669.9	648.3	634.0	623.9	618.3	617.1	616.5	619.6
45°	730.5	687.4	647.1	620.9	602.8	588.3	582.5	578.0	578.0	580.6	581.2
47.5°	673.4	633.2	600.8	571.6	554.9	545.9	540.8	538.5	538.8	541.3	544.3
50°	638.6	598.8	566.8	540.8	525.2	516.7	512.2	510.9	512.2	512.2	516.7
52.5°	600.5	565.0	533.5	511.6	493.9	486.0	483.4	481.6	482.4	484.6	486.4
55°	544.7	512.8	482.9	461.9	448.9	443.7	437.9	438.5	437.2	438.5	438.5
57.5°	488.8	460.1	432.3	415.8	404.3	396.7	390.3	392.1	390.2	389.9	388.9
60°	452.9	421.6	399.4	384.5	371.4	364.9	359.0	360.3	358.4	357.0	354.5
62.5°	413.8	387.7	366.6	352.1	341.7	334.1	328.3	327.0	322.4	318.0	312.3
65°	357.0	335.5	316.7	303.0	293.2	287.4	282.8	278.9	269.1	258.6	253.4
67.5°	302.0	286.4	268.8	257.2	249.3	241.6	232.9	226.2	217.1	211.4	208.1
70°	266.5	251.5	236.5	225.5	217.0	209.8	200.0	195.5	189.0	186.3	183.1
72.5°	232.6	218.7	204.7	194.7	185.7	180.1	172.4	167.9	164.9	163.9	160.7
75°	181.2	170.0	159.7	150.5	143.4	139.4	136.2	132.9	131.6	125.7	122.5
77.5°	132.1	124.9	118.3	111.8	106.7	104.2	97.8	94.1	91.9	89.2	88.5
80°	102.9	97.7	91.2	87.3	80.1	77.6	74.9	74.3	73.6	73.0	72.3
82.5°	77.4	72.2	65.7	63.3	61.4	59.9	58.2	57.6	56.9	57.3	57.2
85°	39.1	36.5	36.5	35.8	35.2	34.5	33.8	33.8	33.3	33.8	33.3
87.5°	14.5	14.0	15.2	14.1	15.0	15.4	14.7	14.9	15.6	14.7	14.7
90°	7.5	7.5	13.2	13.2	15.1	17.0	16.0	17.0	17.9	18.9	18.9
92.5°	49.7	69.3	117.1	190.1	261.2	298.5	248.6	184.8	139.1	110.7	91.8
95°	78.1	117.6	199.4	353.8	578.7	766.9	788.5	697.2	551.4	425.3	334.0
97.5°	94.4	127.6	190.7	318.0	541.6	807.7	990.6	1030.2	975.9	883.9	785.7
100°	107.3	137.4	192.9	299.3	491.2	756.5	997.4	1134.8	1153.6	1107.5	1037.8
102.5°	121.6	150.1	200.4	294.0	457.3	692.6	940.9	1129.5	1222.9	1236.2	1207.2
105°	145.8	173.1	218.3	296.4	428.1	617.3	838.4	1053.9	1216.6	1309.8	1348.4
107.5°	170.9	197.7	239.2	310.3	422.8	575.1	755.5	946.4	1119.7	1250.9	1334.8
110°	188.2	213.6	255.0	320.8	424.3	560.8	714.2	881.7	1044.4	1180.9	1284.4



TEST NUMBER: P332975-830

CATALOG NUMBER: SA4XXRDIP-C1020D1035U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	204.7	230.2	270.0	332.2	428.9	554.0	690.9	834.2	978.2	1107.1	1210.6
115°	230.5	255.9	293.6	350.1	437.5	550.4	669.0	786.6	902.4	1012.5	1102.8
117.5°	254.2	280.6	316.3	368.3	446.8	549.5	659.2	763.3	859.1	945.7	1022.3
120°	270.0	296.4	332.2	381.1	453.6	549.5	653.9	752.7	840.3	915.6	982.3
122.5°	285.9	311.4	347.2	393.1	460.3	548.7	647.9	743.8	828.2	896.7	955.3
125°	307.6	334.0	367.9	411.2	470.5	547.6	638.0	728.3	809.2	874.1	925.9
127.5°	327.8	354.4	387.1	426.8	478.5	545.5	624.6	709.5	786.8	851.6	900.7
130°	340.6	367.9	399.9	436.6	484.6	544.8	616.3	694.5	768.7	832.7	882.6
132.5°	352.7	378.4	410.5	446.4	489.8	544.0	608.8	678.6	748.5	810.9	860.8
135°	369.8	394.3	425.3	459.2	497.8	542.9	597.5	656.8	717.9	775.3	822.4
137.5°	384.3	407.6	436.6	468.3	502.5	542.7	587.7	637.1	688.8	737.2	779.7
140°	393.3	415.9	444.1	474.2	506.2	542.0	582.5	625.8	670.0	712.3	751.8
142.5°	401.6	423.4	450.9	478.7	509.3	542.0	578.0	615.2	654.1	690.5	724.7
145°	413.1	433.8	458.3	483.6	511.0	540.1	570.2	600.3	632.4	660.5	686.9
147.5°	424.1	442.8	465.8	488.0	511.9	536.7	563.3	588.1	613.5	636.1	656.8
150°	430.9	448.8	469.6	490.2	511.9	534.4	558.0	580.6	602.2	621.0	638.0
152.5°	437.7	454.1	472.6	491.7	510.4	530.7	552.0	572.3	590.9	608.2	622.2
155°	447.0	461.1	477.0	493.0	508.1	525.1	542.9	559.9	575.0	589.0	600.3
157.5°	455.6	466.7	480.2	493.0	505.7	519.2	533.7	546.5	559.1	571.0	580.0
160°	460.1	470.5	481.7	493.0	503.4	514.7	527.0	538.2	548.6	558.9	566.5
162.5°	464.7	472.8	483.2	493.0	501.1	510.2	520.9	529.9	538.8	546.9	553.6
165°	469.6	475.1	483.6	491.2	496.8	503.4	511.0	518.5	524.1	530.7	535.4
167.5°	473.0	477.2	483.4	488.9	492.3	496.6	501.9	507.4	511.7	517.0	519.8
170°	475.1	478.0	482.7	487.4	489.3	492.1	495.9	500.6	503.4	507.2	510.0
172.5°	476.6	478.7	481.9	485.9	486.3	487.6	490.6	494.6	496.6	498.9	501.0
175°	478.9	478.9	480.8	483.6	482.7	482.7	484.6	486.4	487.4	489.3	489.3
177.5°	478.9	478.9	479.7	481.2	479.7	479.7	480.4	481.2	481.9	481.9	482.7
180°	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9



TEST NUMBER: P332975-830

CATALOG NUMBER: SA4XXRDIP-C1020D1035U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2
2.5°	1543.7	1544.7	1541.2	1540.1	1541.2	1544.7	1543.7	1546.9	1547.4	1551.5	1550.0
5°	1432.2	1430.9	1427.6	1428.2	1427.6	1430.9	1432.2	1437.4	1440.0	1450.4	1449.2
7.5°	1336.8	1331.7	1333.1	1327.9	1333.1	1331.7	1336.8	1341.5	1349.4	1354.2	1365.2
10°	1278.4	1271.2	1265.4	1260.2	1265.4	1271.2	1278.4	1281.0	1292.1	1297.3	1308.3
12.5°	1198.6	1192.5	1184.6	1186.2	1184.6	1192.5	1198.6	1210.1	1224.4	1235.3	1252.6
15°	1085.5	1075.7	1060.2	1062.1	1060.2	1075.7	1085.5	1094.0	1108.3	1133.1	1144.8
17.5°	989.8	989.9	982.7	984.4	982.7	989.9	989.8	1001.4	1008.6	1024.4	1042.4
20°	940.3	935.7	936.3	934.3	936.3	935.7	940.3	953.9	961.8	972.8	992.4
22.5°	905.9	900.2	895.7	891.6	895.7	900.2	905.9	909.6	920.0	930.6	946.5
25°	847.7	843.8	837.9	836.6	837.9	843.8	847.7	853.6	858.8	872.5	882.2
27.5°	796.6	795.9	793.5	790.5	793.5	795.9	796.6	801.8	808.6	817.4	829.7
30°	766.9	765.6	764.3	762.3	764.3	765.6	766.9	772.1	777.3	784.5	794.3
32.5°	740.4	739.5	738.2	738.4	738.2	739.5	740.4	742.9	746.0	755.4	763.0
35°	702.4	701.7	700.5	699.8	700.5	701.7	702.4	705.0	707.0	709.5	716.0
37.5°	666.9	668.6	667.9	667.7	667.9	668.6	666.9	667.6	665.5	670.2	674.7
40°	642.4	643.1	644.4	643.8	644.4	643.1	642.4	643.1	643.1	643.1	647.1
42.5°	622.2	622.3	624.1	621.9	624.1	622.3	622.2	619.6	616.5	617.1	618.3
45°	585.8	589.7	589.0	589.0	589.0	589.7	585.8	581.2	580.6	578.0	578.0
47.5°	546.0	549.4	550.4	550.2	550.4	549.4	546.0	544.3	541.3	538.8	538.5
50°	520.0	518.7	520.7	520.0	520.7	518.7	520.0	516.7	512.2	512.2	510.9
52.5°	488.1	488.4	488.3	487.7	488.3	488.4	488.1	486.4	484.6	482.4	481.6
55°	439.1	439.8	438.5	439.1	438.5	439.8	439.1	438.5	438.5	437.2	438.5
57.5°	386.0	382.9	384.2	382.6	384.2	382.9	386.0	388.9	389.9	390.2	392.1
60°	348.0	342.7	341.4	338.8	341.4	342.7	348.0	354.5	357.0	358.4	360.3
62.5°	305.2	301.5	297.1	299.2	297.1	301.5	305.2	312.3	318.0	322.4	327.0
65°	248.3	245.6	243.6	246.3	243.6	245.6	248.3	253.4	258.6	269.1	278.9
67.5°	205.5	204.1	204.1	202.7	204.1	204.1	205.5	208.1	211.4	217.1	226.2
70°	183.1	181.2	181.2	179.8	181.2	181.2	183.1	183.1	186.3	189.0	195.5
72.5°	160.1	158.2	158.7	158.0	158.7	158.2	160.1	160.7	163.9	164.9	167.9
75°	118.6	115.4	115.4	116.0	115.4	115.4	118.6	122.5	125.7	131.6	132.9
77.5°	88.5	87.8	88.8	87.6	88.8	87.8	88.5	88.5	89.2	91.9	94.1
80°	72.3	71.6	71.1	73.0	71.1	71.6	72.3	72.3	73.0	73.6	74.3
82.5°	56.2	56.1	55.9	58.3	55.9	56.1	56.2	57.2	57.3	56.9	57.6
85°	33.8	32.6	33.8	32.6	33.8	32.6	33.8	33.3	33.8	33.3	33.8
87.5°	15.9	15.6	14.9	15.5	14.9	15.6	15.9	14.7	14.7	15.6	14.9
90°	19.8	20.7	19.8	19.8	19.8	20.7	19.8	18.9	18.9	17.9	17.0
92.5°	80.8	75.7	72.5	72.5	72.5	75.7	80.8	91.8	110.7	139.1	184.8
95°	287.9	258.7	241.9	229.6	241.9	258.7	287.9	334.0	425.3	551.4	697.2
97.5°	718.1	661.5	633.3	613.7	633.3	661.5	718.1	785.7	883.9	975.9	1030.2
100°	956.0	898.6	870.3	862.9	870.3	898.6	956.0	1037.8	1107.5	1153.6	1134.8
102.5°	1157.0	1115.4	1085.7	1079.7	1085.7	1115.4	1157.0	1207.2	1236.2	1222.9	1129.5
105°	1350.3	1342.7	1329.6	1323.9	1329.6	1342.7	1350.3	1348.4	1309.8	1216.6	1053.9
107.5°	1381.3	1402.8	1412.2	1414.7	1412.2	1402.8	1381.3	1334.8	1250.9	1119.7	946.4
110°	1351.2	1390.7	1407.7	1416.2	1407.7	1390.7	1351.2	1284.4	1180.9	1044.4	881.7



TEST NUMBER: P332975-830

CATALOG NUMBER: SA4XXRDIP-C1020D1035U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	1286.5	1334.3	1358.0	1371.7	1358.0	1334.3	1286.5	1210.6	1107.1	978.2	834.2
115°	1177.1	1233.6	1263.7	1271.2	1263.7	1233.6	1177.1	1102.8	1012.5	902.4	786.6
117.5°	1085.7	1133.1	1163.6	1169.4	1163.6	1133.1	1085.7	1022.3	945.7	859.1	763.3
120°	1035.9	1077.4	1101.8	1112.2	1101.8	1077.4	1035.9	982.3	915.6	840.3	752.7
122.5°	1000.6	1035.9	1056.7	1067.1	1056.7	1035.9	1000.6	955.3	896.7	828.2	743.8
125°	963.6	990.8	1008.7	1014.4	1008.7	990.8	963.6	925.9	874.1	809.2	728.3
127.5°	938.5	962.8	977.8	983.4	977.8	962.8	938.5	900.7	851.6	786.8	709.5
130°	921.1	944.7	959.8	965.4	959.8	944.7	921.1	882.6	832.7	768.7	694.5
132.5°	898.6	925.1	939.4	945.1	939.4	925.1	898.6	860.8	810.9	748.5	678.6
135°	860.1	886.4	901.4	907.1	901.4	886.4	860.1	822.4	775.3	717.9	656.8
137.5°	814.8	840.8	853.3	860.1	853.3	840.8	814.8	779.7	737.2	688.8	637.1
140°	784.8	805.5	818.6	826.1	818.6	805.5	784.8	751.8	712.3	670.0	625.8
142.5°	753.8	773.1	784.8	790.0	784.8	773.1	753.8	724.7	690.5	654.1	615.2
145°	710.4	726.4	735.8	740.6	735.8	726.4	710.4	686.9	660.5	632.4	600.3
147.5°	674.1	687.9	695.0	696.6	695.0	687.9	674.1	656.8	636.1	613.5	588.1
150°	653.0	665.2	670.9	671.8	670.9	665.2	653.0	638.0	621.0	602.2	580.6
152.5°	635.0	644.9	648.3	649.2	648.3	644.9	635.0	622.2	608.2	590.9	572.3
155°	609.7	617.3	620.1	620.1	620.1	617.3	609.7	600.3	589.0	575.0	559.9
157.5°	587.1	592.8	594.5	594.5	594.5	592.8	587.1	580.0	571.0	559.1	546.5
160°	572.1	577.8	578.7	578.7	578.7	577.8	572.1	566.5	558.9	548.6	538.2
162.5°	557.8	563.5	564.4	563.6	564.4	563.5	557.8	553.6	546.9	538.8	529.9
165°	539.1	542.9	542.0	541.0	542.0	542.9	539.1	535.4	530.7	524.1	518.5
167.5°	521.7	524.1	524.0	523.2	524.0	524.1	521.7	519.8	517.0	511.7	507.4
170°	511.9	512.8	511.9	511.9	511.9	512.8	511.9	510.0	507.2	503.4	500.6
172.5°	502.1	503.0	502.1	500.6	502.1	503.0	502.1	501.0	498.9	496.6	494.6
175°	489.3	491.2	489.3	487.4	489.3	491.2	489.3	489.3	489.3	487.4	486.4
177.5°	481.9	482.7	481.2	479.7	481.2	482.7	481.9	482.7	481.9	481.9	481.2
180°	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9



TEST NUMBER: P332975-830

CATALOG NUMBER: SA4XXRDIP-C1020D1035U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2
2.5°	1546.9	1550.5	1558.9	1568.2	1576.0	1582.8	1588.0	1595.3	1602.1	1611.5	1620.3
5°	1453.0	1462.2	1475.2	1490.8	1510.3	1523.4	1539.7	1554.1	1574.9	1595.7	1615.9
7.5°	1370.6	1380.7	1399.9	1421.4	1444.7	1466.0	1485.4	1510.6	1538.2	1568.6	1602.5
10°	1317.5	1328.6	1351.4	1376.1	1403.5	1424.4	1450.4	1480.4	1511.6	1548.8	1590.5
12.5°	1269.5	1280.1	1307.6	1332.8	1361.3	1384.2	1414.5	1444.9	1486.7	1526.9	1574.3
15°	1176.1	1204.1	1235.4	1265.4	1299.3	1327.3	1363.8	1395.1	1434.8	1491.5	1545.6
17.5°	1072.3	1102.2	1141.0	1187.3	1232.8	1267.4	1304.5	1343.3	1390.6	1448.5	1510.9
20°	1011.9	1036.0	1079.0	1130.5	1183.3	1231.5	1265.4	1308.3	1357.3	1419.8	1484.3
22.5°	966.6	987.0	1020.7	1072.1	1129.1	1185.1	1228.3	1270.8	1324.9	1387.5	1457.7
25°	898.5	920.7	950.0	985.2	1050.4	1109.7	1166.3	1215.2	1272.5	1335.1	1413.2
27.5°	842.0	861.3	888.1	924.7	968.6	1034.0	1102.6	1158.4	1217.2	1284.3	1362.6
30°	808.6	824.3	846.4	883.5	925.3	983.9	1053.6	1118.8	1178.1	1247.7	1329.3
32.5°	773.7	790.4	812.0	841.3	886.2	935.4	1005.1	1076.6	1139.5	1210.8	1290.6
35°	727.2	740.2	759.8	789.8	830.1	873.1	935.0	1008.6	1075.2	1151.3	1227.6
37.5°	680.1	695.5	710.9	737.6	770.7	817.0	867.6	942.8	1016.4	1086.1	1160.5
40°	653.6	662.7	679.6	701.1	736.3	777.3	824.9	898.5	972.1	1041.2	1116.2
42.5°	623.9	634.0	648.3	669.9	701.3	741.4	787.9	851.6	928.4	995.3	1063.5
45°	582.5	588.3	602.8	620.9	647.1	687.4	730.5	787.1	859.4	923.3	983.3
47.5°	540.8	545.9	554.9	571.6	600.8	633.2	673.4	724.3	787.8	851.6	902.3
50°	512.2	516.7	525.2	540.8	566.8	598.8	638.6	684.2	740.8	802.1	844.4
52.5°	483.4	486.0	493.9	511.6	533.5	565.0	600.5	642.4	695.5	746.3	789.2
55°	437.9	443.7	448.9	461.9	482.9	512.8	544.7	584.5	625.6	668.5	705.0
57.5°	390.3	396.7	404.3	415.8	432.3	460.1	488.8	521.0	556.1	591.7	622.4
60°	359.0	364.9	371.4	384.5	399.4	421.6	452.9	480.9	507.6	540.2	570.8
62.5°	328.3	334.1	341.7	352.1	366.6	387.7	413.8	438.1	465.9	494.3	517.1
65°	282.8	287.4	293.2	303.0	316.7	335.5	357.0	376.0	400.8	421.6	442.4
67.5°	232.9	241.6	249.3	257.2	268.8	286.4	302.0	320.1	336.9	352.4	371.4
70°	200.0	209.8	217.0	225.5	236.5	251.5	266.5	278.9	292.6	307.6	324.5
72.5°	172.4	180.1	185.7	194.7	204.7	218.7	232.6	242.9	254.0	264.3	280.7
75°	136.2	139.4	143.4	150.5	159.7	170.0	181.2	190.3	196.8	205.9	217.6
77.5°	97.8	104.2	106.7	111.8	118.3	124.9	132.1	139.9	146.1	149.3	158.3
80°	74.9	77.6	80.1	87.3	91.2	97.7	102.9	110.1	112.7	116.0	124.4
82.5°	58.2	59.9	61.4	63.3	65.7	72.2	77.4	82.0	84.5	85.8	92.2
85°	33.8	34.5	35.2	35.8	36.5	36.5	39.1	42.3	46.9	46.9	48.8
87.5°	14.7	15.4	15.0	14.1	15.2	14.0	14.5	14.3	15.7	16.7	17.9
90°	16.0	17.0	15.1	13.2	13.2	7.5	7.5	6.6	5.7	2.8	0.9
92.5°	248.6	298.5	261.2	190.1	117.1	69.3	49.7	35.9	24.5	15.6	10.7
95°	788.5	766.9	578.7	353.8	199.4	117.6	78.1	55.5	43.3	33.8	31.0
97.5°	990.6	807.7	541.6	318.0	190.7	127.6	94.4	75.1	63.8	55.7	55.7
100°	997.4	756.5	491.2	299.3	192.9	137.4	107.3	89.4	78.1	71.5	71.5
102.5°	940.9	692.6	457.3	294.0	200.4	150.1	121.6	104.4	93.9	88.0	86.5
105°	838.4	617.3	428.1	296.4	218.3	173.1	145.8	128.9	117.6	112.9	110.1
107.5°	755.5	575.1	422.8	310.3	239.2	197.7	170.9	154.7	142.6	138.0	136.1
110°	714.2	560.8	424.3	320.8	255.0	213.6	188.2	171.3	159.9	155.2	153.4



TEST NUMBER: P332975-830

CATALOG NUMBER: SA4XXRDIP-C1020D1035U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	690.9	554.0	428.9	332.2	270.0	230.2	204.7	187.8	177.3	171.8	169.9
115°	669.0	550.4	437.5	350.1	293.6	255.9	230.5	212.6	203.2	196.6	193.9
117.5°	659.2	549.5	446.8	368.3	316.3	280.6	254.2	237.5	227.2	221.3	218.7
120°	653.9	549.5	453.6	381.1	332.2	296.4	270.0	254.0	243.7	237.1	235.3
122.5°	647.9	548.7	460.3	393.1	347.2	311.4	285.9	268.3	258.7	252.1	250.3
125°	638.0	547.6	470.5	411.2	367.9	334.0	307.6	289.8	279.5	273.8	270.0
127.5°	624.6	545.5	478.5	426.8	387.1	354.4	327.8	309.2	297.4	290.6	287.6
130°	616.3	544.8	484.6	436.6	399.9	367.9	340.6	322.7	308.6	301.1	297.4
132.5°	608.8	544.0	489.8	446.4	410.5	378.4	352.7	333.3	319.9	310.1	307.1
135°	597.5	542.9	497.8	459.2	425.3	394.3	369.8	350.1	334.0	324.6	320.8
137.5°	587.7	542.7	502.5	468.3	436.6	407.6	384.3	363.7	348.6	338.2	334.6
140°	582.5	542.0	506.2	474.2	444.1	415.9	393.3	373.5	357.6	347.2	344.4
142.5°	578.0	542.0	509.3	478.7	450.9	423.4	401.6	382.6	367.3	357.8	355.0
145°	570.2	540.1	511.0	483.6	458.3	433.8	413.1	395.2	382.0	372.6	369.8
147.5°	563.3	536.7	511.9	488.0	465.8	442.8	424.1	409.3	395.8	387.5	386.5
150°	558.0	534.4	511.9	490.2	469.6	448.8	430.9	416.9	405.6	398.0	397.1
152.5°	552.0	530.7	510.4	491.7	472.6	454.1	437.7	425.1	414.6	407.1	406.9
155°	542.9	525.1	508.1	493.0	477.0	461.1	447.0	436.6	427.2	421.5	420.6
157.5°	533.7	519.2	505.7	493.0	480.2	466.7	455.6	446.6	439.2	433.9	433.9
160°	527.0	514.7	503.4	493.0	481.7	470.5	460.1	452.6	446.0	442.2	442.2
162.5°	520.9	510.2	501.1	493.0	483.2	472.8	464.7	457.9	452.0	449.0	449.8
165°	511.0	503.4	496.8	491.2	483.6	475.1	469.6	464.9	460.1	458.3	458.3
167.5°	501.9	496.6	492.3	488.9	483.4	477.2	473.0	470.3	466.7	465.8	466.7
170°	495.9	492.1	489.3	487.4	482.7	478.0	475.1	473.3	470.5	469.6	470.5
172.5°	490.6	487.6	486.3	485.9	481.9	478.7	476.6	475.5	473.4	473.3	474.2
175°	484.6	482.7	482.7	483.6	480.8	478.9	478.9	478.0	477.0	477.0	478.0
177.5°	480.4	479.7	479.7	481.2	479.7	478.9	478.9	478.9	478.2	478.9	479.7
180°	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9



TEST NUMBER: P332975-830

CATALOG NUMBER: SA4XXRDIP-C1020D1035U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2
2.5°	1627.1	1631.8	1637.0	1646.9	1655.3	1659.0	1666.2	1671.4	1669.9	1677.2	1689.7
5°	1633.5	1651.1	1671.3	1692.1	1715.6	1735.1	1750.8	1766.4	1778.9	1793.8	1816.0
7.5°	1632.5	1663.8	1697.8	1735.1	1773.6	1806.9	1837.6	1868.9	1896.6	1927.0	1966.7
10°	1628.3	1670.0	1712.3	1761.2	1810.1	1856.3	1898.1	1937.1	1974.3	2014.0	2064.3
12.5°	1623.6	1671.6	1722.8	1781.6	1842.4	1898.1	1947.1	2003.4	2049.8	2101.1	2159.1
15°	1602.9	1667.4	1737.1	1813.4	1886.3	1961.2	2028.4	2097.4	2161.9	2223.2	2296.2
17.5°	1579.1	1653.6	1735.8	1825.9	1913.5	2004.7	2084.2	2171.3	2237.3	2319.5	2387.3
20°	1559.9	1640.0	1728.0	1829.0	1928.7	2029.7	2117.6	2206.3	2280.6	2363.3	2449.3
22.5°	1536.4	1624.4	1719.7	1824.3	1928.7	2039.1	2136.4	2224.5	2316.5	2409.7	2498.3
25°	1498.6	1589.9	1690.8	1805.5	1925.4	2038.2	2142.4	2251.8	2350.9	2451.9	2531.4
27.5°	1452.3	1548.0	1654.5	1772.8	1895.8	2011.3	2134.1	2250.7	2350.4	2447.6	2517.0
30°	1415.2	1516.3	1618.5	1738.4	1866.1	1989.9	2121.6	2238.2	2343.1	2430.4	2469.5
32.5°	1377.1	1473.0	1578.4	1699.9	1830.7	1963.9	2094.4	2213.7	2310.7	2363.1	2364.2
35°	1311.0	1400.9	1510.3	1629.7	1763.9	1908.5	2040.8	2158.0	2217.3	2221.9	2158.0
37.5°	1238.8	1321.3	1424.7	1544.0	1691.0	1834.8	1970.0	2048.1	2068.0	2001.7	1883.6
40°	1187.2	1263.4	1363.1	1485.6	1631.5	1780.1	1903.3	1960.6	1939.8	1832.2	1700.6
42.5°	1132.9	1204.0	1300.0	1421.0	1567.4	1717.6	1822.5	1853.2	1798.0	1673.8	1519.8
45°	1044.5	1109.7	1204.8	1326.6	1467.4	1608.1	1687.6	1672.0	1580.1	1432.9	1260.2
47.5°	952.3	1015.3	1100.9	1213.6	1357.7	1479.2	1533.0	1485.9	1355.2	1193.2	1052.7
50°	891.4	955.8	1034.7	1142.3	1273.8	1391.1	1425.7	1354.0	1208.7	1052.9	924.0
52.5°	831.4	886.6	963.8	1067.7	1193.5	1292.6	1311.0	1228.3	1078.4	938.8	824.3
55°	740.2	790.4	855.5	953.3	1062.1	1146.1	1136.3	1030.2	894.0	774.8	684.9
57.5°	652.0	689.8	750.0	841.6	937.1	993.5	957.8	867.2	740.4	642.7	566.8
60°	593.6	628.8	684.9	765.0	849.0	880.9	850.9	752.6	652.2	563.0	499.1
62.5°	538.4	569.4	617.6	692.0	759.9	778.7	746.7	660.8	570.4	494.2	441.3
65°	458.1	486.7	527.8	580.6	627.5	636.6	615.8	527.8	459.4	395.5	359.0
67.5°	385.2	404.0	436.0	481.6	506.5	511.9	471.6	416.3	356.0	316.8	289.3
70°	336.2	349.2	379.2	404.0	424.1	424.8	387.7	343.4	297.1	265.2	245.0
72.5°	288.8	301.3	324.0	340.9	356.4	351.4	317.4	282.4	245.0	220.9	205.9
75°	222.8	233.9	245.6	253.4	253.4	246.9	222.2	196.1	174.7	160.3	155.7
77.5°	162.0	171.1	175.0	173.8	171.5	161.4	145.7	128.7	120.9	114.1	110.7
80°	127.1	131.0	132.2	129.0	125.1	113.4	102.9	95.8	88.6	86.1	84.7
82.5°	94.3	97.6	94.3	95.1	86.5	76.9	71.2	68.7	65.7	64.7	63.3
85°	50.1	49.5	48.3	45.0	39.1	37.8	37.1	36.5	35.2	35.8	34.5
87.5°	17.7	16.8	14.9	14.5	14.5	14.6	15.2	15.6	15.9	15.2	16.4
90°	2.8	5.7	6.6	7.5	7.5	13.2	13.2	15.1	17.0	16.0	17.0
92.5°	15.6	24.5	35.9	49.7	69.3	117.1	190.1	261.2	298.5	248.6	184.8
95°	33.8	43.3	55.5	78.1	117.6	199.4	353.8	578.7	766.9	788.5	697.2
97.5°	55.7	63.8	75.1	94.4	127.6	190.7	318.0	541.6	807.7	990.6	1030.2
100°	71.5	78.1	89.4	107.3	137.4	192.9	299.3	491.2	756.5	997.4	1134.8
102.5°	88.0	93.9	104.4	121.6	150.1	200.4	294.0	457.3	692.6	940.9	1129.5
105°	112.9	117.6	128.9	145.8	173.1	218.3	296.4	428.1	617.3	838.4	1053.9
107.5°	138.0	142.6	154.7	170.9	197.7	239.2	310.3	422.8	575.1	755.5	946.4
110°	155.2	159.9	171.3	188.2	213.6	255.0	320.8	424.3	560.8	714.2	881.7



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	171.8	177.3	187.8	204.7	230.2	270.0	332.2	428.9	554.0	690.9	834.2
115°	196.6	203.2	212.6	230.5	255.9	293.6	350.1	437.5	550.4	669.0	786.6
117.5°	221.3	227.2	237.5	254.2	280.6	316.3	368.3	446.8	549.5	659.2	763.3
120°	237.1	243.7	254.0	270.0	296.4	332.2	381.1	453.6	549.5	653.9	752.7
122.5°	252.1	258.7	268.3	285.9	311.4	347.2	393.1	460.3	548.7	647.9	743.8
125°	273.8	279.5	289.8	307.6	334.0	367.9	411.2	470.5	547.6	638.0	728.3
127.5°	290.6	297.4	309.2	327.8	354.4	387.1	426.8	478.5	545.5	624.6	709.5
130°	301.1	308.6	322.7	340.6	367.9	399.9	436.6	484.6	544.8	616.3	694.5
132.5°	310.1	319.9	333.3	352.7	378.4	410.5	446.4	489.8	544.0	608.8	678.6
135°	324.6	334.0	350.1	369.8	394.3	425.3	459.2	497.8	542.9	597.5	656.8
137.5°	338.2	348.6	363.7	384.3	407.6	436.6	468.3	502.5	542.7	587.7	637.1
140°	347.2	357.6	373.5	393.3	415.9	444.1	474.2	506.2	542.0	582.5	625.8
142.5°	357.8	367.3	382.6	401.6	423.4	450.9	478.7	509.3	542.0	578.0	615.2
145°	372.6	382.0	395.2	413.1	433.8	458.3	483.6	511.0	540.1	570.2	600.3
147.5°	387.5	395.8	409.3	424.1	442.8	465.8	488.0	511.9	536.7	563.3	588.1
150°	398.0	405.6	416.9	430.9	448.8	469.6	490.2	511.9	534.4	558.0	580.6
152.5°	407.1	414.6	425.1	437.7	454.1	472.6	491.7	510.4	530.7	552.0	572.3
155°	421.5	427.2	436.6	447.0	461.1	477.0	493.0	508.1	525.1	542.9	559.9
157.5°	433.9	439.2	446.6	455.6	466.7	480.2	493.0	505.7	519.2	533.7	546.5
160°	442.2	446.0	452.6	460.1	470.5	481.7	493.0	503.4	514.7	527.0	538.2
162.5°	449.0	452.0	457.9	464.7	472.8	483.2	493.0	501.1	510.2	520.9	529.9
165°	458.3	460.1	464.9	469.6	475.1	483.6	491.2	496.8	503.4	511.0	518.5
167.5°	465.8	466.7	470.3	473.0	477.2	483.4	488.9	492.3	496.6	501.9	507.4
170°	469.6	470.5	473.3	475.1	478.0	482.7	487.4	489.3	492.1	495.9	500.6
172.5°	473.3	473.4	475.5	476.6	478.7	481.9	485.9	486.3	487.6	490.6	494.6
175°	477.0	477.0	478.0	478.9	478.9	480.8	483.6	482.7	482.7	484.6	486.4
177.5°	478.9	478.2	478.9	478.9	478.9	479.7	481.2	479.7	479.7	480.4	481.2
180°	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2
2.5°	1696.5	1698.6	1700.2	1705.3	1705.8	1710.5	1705.8
5°	1836.8	1846.0	1860.3	1874.6	1875.9	1885.0	1868.8
7.5°	1994.2	2015.3	2028.5	2051.7	2060.9	2066.5	2057.2
10°	2102.6	2122.2	2156.7	2173.7	2190.7	2193.2	2185.4
12.5°	2207.4	2238.4	2265.7	2297.7	2297.0	2319.9	2311.6
15°	2347.0	2379.0	2416.7	2452.6	2465.6	2465.6	2476.1
17.5°	2446.6	2505.1	2544.2	2572.3	2603.1	2608.4	2604.8
20°	2513.9	2577.0	2618.8	2655.2	2676.1	2681.9	2681.9
22.5°	2563.8	2617.6	2658.3	2691.1	2708.4	2715.3	2713.2
25°	2598.5	2644.8	2669.6	2679.3	2683.9	2682.6	2670.2
27.5°	2551.1	2549.0	2533.4	2503.4	2480.9	2467.2	2451.6
30°	2460.4	2426.5	2387.4	2344.4	2289.1	2246.6	2233.6
32.5°	2325.3	2249.3	2183.0	2111.4	2051.8	2009.5	1991.8
35°	2064.3	1943.7	1845.3	1759.3	1696.8	1657.6	1644.6
37.5°	1754.4	1637.7	1515.9	1432.5	1380.5	1341.0	1326.3
40°	1557.3	1430.2	1324.0	1245.9	1192.4	1154.0	1153.3
42.5°	1377.4	1256.1	1156.2	1099.9	1042.3	1016.8	1016.7
45°	1127.8	1030.8	946.1	901.8	867.2	846.4	840.6
47.5°	933.9	853.6	797.1	761.9	733.7	720.4	711.8
50°	824.9	754.5	709.5	678.9	663.3	646.4	645.1
52.5°	734.2	677.4	642.3	617.5	597.7	587.5	587.8
55°	617.1	572.1	547.3	528.4	512.8	505.0	501.7
57.5°	519.8	486.1	468.1	450.7	444.1	438.0	436.3
60°	459.4	436.6	419.6	406.0	396.2	394.2	393.5
62.5°	409.3	385.5	373.7	363.2	356.0	353.0	351.9
65°	337.5	319.9	309.5	301.0	298.4	293.9	293.2
67.5°	272.1	261.6	254.7	248.7	245.2	245.0	245.0
70°	232.0	226.1	220.3	217.0	215.0	213.7	213.7
72.5°	197.6	193.2	188.4	186.7	186.3	185.0	184.5
75°	150.5	146.0	146.6	143.4	140.7	137.5	135.5
77.5°	106.7	103.5	102.8	102.5	100.2	99.8	100.9
80°	82.8	79.5	78.8	79.5	78.8	76.9	76.9
82.5°	63.0	60.2	59.6	59.2	58.5	59.2	58.2
85°	33.8	32.6	32.6	32.6	33.8	33.3	32.6
87.5°	15.6	15.3	15.7	15.5	15.6	14.9	15.5
90°	17.9	18.9	18.9	19.8	20.7	19.8	19.8
92.5°	139.1	110.7	91.8	80.8	75.7	72.5	72.5
95°	551.4	425.3	334.0	287.9	258.7	241.9	229.6
97.5°	975.9	883.9	785.7	718.1	661.5	633.3	613.7
100°	1153.6	1107.5	1037.8	956.0	898.6	870.3	862.9
102.5°	1222.9	1236.2	1207.2	1157.0	1115.4	1085.7	1079.7
105°	1216.6	1309.8	1348.4	1350.3	1342.7	1329.6	1323.9
107.5°	1119.7	1250.9	1334.8	1381.3	1402.8	1412.2	1414.7
110°	1044.4	1180.9	1284.4	1351.2	1390.7	1407.7	1416.2



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	978.2	1107.1	1210.6	1286.5	1334.3	1358.0	1371.7
115°	902.4	1012.5	1102.8	1177.1	1233.6	1263.7	1271.2
117.5°	859.1	945.7	1022.3	1085.7	1133.1	1163.6	1169.4
120°	840.3	915.6	982.3	1035.9	1077.4	1101.8	1112.2
122.5°	828.2	896.7	955.3	1000.6	1035.9	1056.7	1067.1
125°	809.2	874.1	925.9	963.6	990.8	1008.7	1014.4
127.5°	786.8	851.6	900.7	938.5	962.8	977.8	983.4
130°	768.7	832.7	882.6	921.1	944.7	959.8	965.4
132.5°	748.5	810.9	860.8	898.6	925.1	939.4	945.1
135°	717.9	775.3	822.4	860.1	886.4	901.4	907.1
137.5°	688.8	737.2	779.7	814.8	840.8	853.3	860.1
140°	670.0	712.3	751.8	784.8	805.5	818.6	826.1
142.5°	654.1	690.5	724.7	753.8	773.1	784.8	790.0
145°	632.4	660.5	686.9	710.4	726.4	735.8	740.6
147.5°	613.5	636.1	656.8	674.1	687.9	695.0	696.6
150°	602.2	621.0	638.0	653.0	665.2	670.9	671.8
152.5°	590.9	608.2	622.2	635.0	644.9	648.3	649.2
155°	575.0	589.0	600.3	609.7	617.3	620.1	620.1
157.5°	559.1	571.0	580.0	587.1	592.8	594.5	594.5
160°	548.6	558.9	566.5	572.1	577.8	578.7	578.7
162.5°	538.8	546.9	553.6	557.8	563.5	564.4	563.6
165°	524.1	530.7	535.4	539.1	542.9	542.0	541.0
167.5°	511.7	517.0	519.8	521.7	524.1	524.0	523.2
170°	503.4	507.2	510.0	511.9	512.8	511.9	511.9
172.5°	496.6	498.9	501.0	502.1	503.0	502.1	500.6
175°	487.4	489.3	489.3	489.3	491.2	489.3	487.4
177.5°	481.9	481.9	482.7	481.9	482.7	481.2	479.7
180°	478.9	478.9	478.9	478.9	478.9	478.9	478.9

(END OF REPORT)